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EXAMINER
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ART UNIT	PAPER NUMBER
2175	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/401,596	CHESS, DAVID M	
	Examiner	**Art Unit**	
	Neveen Abel-Jalil	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 June 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-37_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3-15,17-29,31-33 and 35-37_ is/are rejected.

7)☒ Claim(s) _2, 16, 30, and 34_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Remarks

1.   The request for reconsideration filed on June 25, 2004 has been received and entered.

Claims 1-37 are pending.

2.   The revised abstract has been received and entered.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 3-15, 17-29, 31-33, and 35-37 rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Chen et al.</u> (U.S. Patent No. 5,960,170) in view of <u>Dotan</u> (U.S. Patent No.

5,822,517).

As to claim 1, <u>Chen et al.</u> discloses a virus detection method for use in a computer system

comprising at least one object that may potentially become infected with a computer virus,

comprising steps of:

for an object that is indicated as having a current state that is described by the stored

information, programmatically examining the object for a presence of a computer virus while

assuming that the current state of the object is the same as the state of the object as it existed at the point in the past (See column 9, lines 11-62, also see column 12, lines 12-67).

Chen et al. does not teach providing a database comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past.

Dotan teaches providing a database comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past (See Dotan column 11, lines 28-48).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Chen et al. to include providing a database comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chen et al. by the teaching of Dotan to include providing a database comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past because storing the state of the object will allow for accurate comparison for virus detection and prevention.

As to claim 3, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of a number and location of archived objects within the object (See figure 4C, shows locations storing object by "Virus Identifier").

As to claim 4, <u>Chen et al.</u> as modified discloses wherein the stored information is descriptive at least in part of features of the object that serve as inputs to a neural network-based virus detection system, and wherein the step of programmatically examining the object comprises a step of operating the neural network-based virus detection system using the features as inputs (See column 19, lines 1-38).

As to claim 5, <u>Chen et al.</u> as modified discloses wherein the stored information is descriptive at least in part of whether at least one macro is present within the object (See column 19, lines 1-38).

As to claim 6, <u>Chen et al.</u> as modified discloses wherein the stored information is descriptive at least in part of whether at least one archived object is present within the object (See figure 4C, shows locations storing object by "Virus Identifier").

As to claim 7, <u>Chen et al.</u> as modified discloses wherein the stored information is descriptive at least in part of whether the object can possibly be infected with a virus according to predetermined criteria, and wherein the step of programmatically examining is executed only if the stored information indicates that the object may possibly be infected according to the predetermined criteria as compared to criteria that are currently in effect (See column 12, lines 1-67).

As to claim 8, <u>Chen et al.</u> as modified discloses wherein if it is indicated that a current state of the object is not described by the stored information, the step of programmatically examining comprises an initial step of processing the object to ascertain the current state of the object, and storing information in the database that is descriptive of the current state of the object (See <u>Dotan</u> column 4, lines 21-64).

As to claim 9, <u>Chen et al.</u> as modified discloses wherein the stored information comprises, for an object that contains in archived or combined form at least one other object, information descriptive of whether the at least one contained object is of a type that should be examined for computer viruses, and wherein the step of programmatically examining avoids re-determining and re-scanning the contained at least one object if the stored information indicates that the at least one contained object is not required to be scanned (See column 3, lines 8-64).

As to claim 10, <u>Chen et al.</u> as modified discloses wherein the stored information comprises, for an object that contains in archived or combined form at least one other object, information descriptive of at least one of a location, extent, or encoding -method of the at least one contained object, and wherein the step of programmatically examining is responsive to the stored information for reducing an amount of processing time required to extract the at least one contained object in order to examine the at least one contained object (See column 27, lines 5-35).

As to claim 11, <u>Chen et al.</u> as modified discloses wherein the stored information comprises information descriptive of a location of an entry-point of the object, and wherein the step of programmatically examining uses the stored information to determine the entry-point of the object, if the database indicates that the object has not changed since the entry point information was stored (See column 11, lines 52-67, and see column 12, lines 1-67).

As to claim 12, <u>Chen et al.</u> as modified discloses wherein the stored information comprises information descriptive of a structure of the object, and wherein the step of programmatically examining uses the stored information to determine the structure of the object, if the database indicates that the object has not changed since the structure information was stored (See <u>Dotan</u> column 7, lines 11-51, also see <u>Chen et al.</u> column 3, lines 28-67).

As to claim 13, <u>Chen et al.</u> as modified discloses wherein the stored information comprises information descriptive of at least one of a number, size, name, extent, or other attribute of macros or other units of active content in the object, and wherein the step of programmatically examining uses the stored information to determine at least one of the number, size, name, extent, or other attribute of macros or other units of active content in the object, if the database indicates that the object has not changed since the information was stored (See column 18, lines 1-16, also see column 11, lines 22-51, and see column 14, lines 32-67).

As to claim 14, <u>Chen et al.</u> as modified discloses wherein the step of programmatically examining includes a program- emulation step for executing the current object in a virtual

environment, for collecting data resulting from the execution in the virtual environment, and for

storing at least some of the results produced by the program- emulation step in the database, and

wherein the step of programmatically examining uses the stored results rather than re-executing

the program-emulation step, if the database indicates that the object has not changed since the

results were stored (See Dotan column 8, lines 18-67, and see Chen et al. column 3, lines 28-67).

As to claim 15, Chen et al. discloses virus detection component for use in a computer

system that stores at least one object that may potentially become infected with a computer virus,

comprising:

an object examination unit bi-directionally coupled to said database and responsive to a

determination that an object has a current state that is described by the stored information, for

programmatically examining the object for a presence of a computer virus while using the stored

information from said database (See column 9, lines 11-62, also see column 12, lines 12-67).

Chen et al. does not teach providing a database comprised of stored information that is

descriptive of a state of the at least one object as it existed at a point in the past.

Dotan teaches providing a database comprised of stored information that is descriptive of

a state of the at least one object as it existed at a point in the past (See Dotan column 11, lines

28-48).

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time of the invention was made to have modified Chen et al. to include providing a database

comprised of stored information that is descriptive of a state of the at least one object as it

existed at a point in the past.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chen et al. by the teaching of Dotan to include providing a database comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past because storing the state of the object will allow for accurate comparison for virus detection and prevention.

As to claim 17, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of a number and location of archived objects within the object (See figure 4C, shows locations storing object by "Virus Identifier").

As to claim 18, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of features of the object that serve as inputs to a neural network-based virus detection system, and wherein said neural network-based virus detection system uses the features as inputs (See column 19, lines 1-38, also see column 21, lines 3-39).

As to claim 19, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of whether at least one macro is present within the object (See column 19, lines 1-38).

As to claim 20, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of whether at least one archived object is present within the object (See column 19, lines 1-29).

As to claim 21, <u>Chen et al.</u> as modified discloses wherein the stored information is descriptive at least in part of whether the object can possibly be infected with a virus according to predetermined criteria, and wherein said object examination unit programmatically examines said object only if the stored information indicates that the object may possibly be infected according to the predetermined criteria as compared to criteria that are currently in effect (See column 12, lines 1-67).

As to claim 22, <u>Chen et al.</u> as modified discloses wherein if said determination indicates that a current state of the object is not described by the information stored in said database, said object examination unit first processes the object to ascertain the current state of the object, and stores information in said database that is descriptive of the current state of the object (See <u>Dotan</u> column 4, lines 21-64).

As to claim 23, <u>Chen et al.</u> as modified discloses wherein the stored information comprises, for an object that contains in archived or combined form at least one other object, information descriptive of whether the at least one contained object is of a type that should be examined for computer viruses, and wherein said object examination unit inhibits re-determining and re-scanning the contained at least one object if the stored information indicates that the at least one contained object is not required to be scanned (See column 19, lines 39-67, and see column 20, lines 1-24).

As to claim 24, Chen et al. as modified discloses wherein the stored information

comprises, for an object that contains in archived or combined form at least one other object,

information descriptive of at least one of a location, extent, or encoding-method of the at least

one contained object, and wherein said object examination unit is responsive to the stored

information for reducing an amount of processing time required to extract the at least one

contained object in order to examine the at least one contained object (See column 18, lines 1-16,

also see column 11, lines 22-51, and see column 14, lines 32-67).

As to claim 25, Chen et al. as modified discloses wherein the stored information

comprises information descriptive of a location of an entry-point of the object, and wherein said

object examination unit is responsive to the stored information to determine the entry-point of

the object, if the database indicates that the object has not changed since the entry-point

information was stored (See column 11, lines 52-67, and see column 12, lines 1-67).

As to claim 26, Chen et al. as modified discloses wherein the stored information

comprises information descriptive of a structure of the object, and wherein said object

examination unit is responsive to the stored information for determining the structure of the

object, if the database indicates that the object has not changed since the structure information

was stored (See Dotan column 7, lines 11-51, also see Chen et al. column 3, lines 28-67).

As to claim 27, Chen et al. as modified discloses wherein the stored information

comprises information descriptive of at least one of a number, size, name, extent, or other

attribute of macros or other units of active content in the object, and wherein said object

examination unit is responsive to the stored information for determining at least one of the

number, size, name, extent, or other attribute of macros or other units of active content in the

object, if the database indicates that the object has not changed since the information was stored

(See column 18, lines 1-16, also see column 11, lines 22-51, and see column 14, lines 32-67).

As to claim 28, Chen et al. as modified discloses further comprising a program-emulation

unit for executing the current object in a virtual environment, for collecting data resulting from

the execution in the virtual environment, and for storing at least some of the results produced by

the program-emulation unit in said database, and wherein said object examination unit is

responsive to the stored results for using said stored results, and for inhibiting the operation of

said program emulation unit, if the database indicates that the object has not changed since the

results were stored (See Dotan column 8, lines 13-50, also see Chen et al. column .

As to claim 29, Chen et al. discloses a computer program embodied on a computer

readable medium for providing a virus detection program subsystem, comprising:

an object examination code segment that is responsive to a determination that the object

has a current state that is described by the stored information in said database, for

programmatically examining the object for a presence of a computer virus while using the stored

information from said database (See column 9, lines 11-62, also see column 12, lines 12-67).

Chen et al. does not teach a code segment for at least maintaining a database that stores information that is descriptive of a state of at least one object as the object existed at a point in the past.

Dotan teaches providing a code segment for at least maintaining a database that stores information that is descriptive of a state of at least one object as the object existed at a point in the past (See Dotan column 11, lines 28-48).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Chen et al. to include a code segment for at least maintaining a database that stores information that is descriptive of a state of at least one object as the object existed at a point in the past.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chen et al. by the teaching of Dotan to include a code segment for at least maintaining a database that stores information that is descriptive of a state of at least one object as the object existed at a point in the past because storing the state of the object will allow for accurate comparison for virus detection and prevention.

As to claim 31, Chen et al. as modified discloses wherein said computer readable medium further stores a neural network based virus detection code segment, wherein said database further stores information descriptive of features of the object that serve as inputs to said neural network-based virus detection code segment, and wherein said neural network-based virus detection code segment uses the features as inputs (See column 19, lines 1-38).

As to claim 32, Chen et al. as modified discloses wherein said computer readable medium further stores a program-emulation code segment for executing objects in a virtual environment, for collecting data resulting from the execution in the virtual environment, and for storing at least some of the results in said database, and wherein said object examination unit code segment is responsive to the stored results for using said stored results, and for inhibiting the operation of said program emulation unit code segment, if said database indicates that the object has not changed since the results were stored (See Dotan column 8, lines 18-67, and see Chen et al. column 3, lines 28-67).

As to claim 33, Chen et al. discloses a computer program embodied on a computer readable medium, the computer program being capable of executing a method for use in a computer system that comprises at least one object that may potentially become infected with a computer virus (See abstract), the method executed by the computer program comprising steps of:

for an object that the database indicates has a current state that is described by the stored information, programmatically examining the object for a presence of a computer virus while assuming that the current state of the object is the same as the state of the object as it existed at the point in the past (See column 9, lines 11-62, also see column 12, lines 12-67).

Chen et al. does not teach maintaining a database that is comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past.

Dotan teaches maintaining a database that is comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past (See Dotan column 11, lines 28-48).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Chen et al. to include maintaining a database that is comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Chen et al. by the teaching of Dotan to include maintaining a database that is comprised of stored information that is descriptive of a state of the at least one object as it existed at a point in the past because storing the state of the object will allow for accurate comparison for virus detection and prevention.

As to claim 35, Chen et al. as modified discloses wherein the stored information is descriptive at least in part of a number and location of archived objects within the object (See figure 4C, shows locations storing object by "Virus Identifier").

As to claim 36, Chen et al. as modified discloses wherein the computer program implements or has access to a neural network-based virus detection system, wherein the stored information is descriptive at least in part of features of the object that serve as inputs to the neural network-based virus detection system, and wherein the step of programmatically

examining the object comprises a step of operating the neural network-based virus detection

system using the features as inputs (See column 19, lines 1-38).

As to claim 37, <u>Chen et al.</u> as modified discloses wherein for an object that the database

indicates has a current state that is not described by the stored information, the step of

programmatically examining comprises an initial step of operating the stored program to process

the object to ascertain the current state of the object, and storing information in the database that

is descriptive of the current state of the object (See <u>Dotan</u> column 4, lines 21-64).

Allowable Subject Matter

5.   Claims 2, 16, 30, and 34 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of the

base claim and any intervening claims.

6.   The prior art of record (<u>Chen et al.</u> -U.S. Patent No. 5,960,170, and <u>Dotan</u> -U.S. Patent

No. 5,822,517) do not disclose, teach, or suggest the claimed limitations of (<u>in combination with</u>

<u>all other features in the claim</u>), wherein the stored information is descriptive at least in part of a

number and location of macros within the object, as found in claims 2, 16, and 34.

The prior art of record (<u>Chen et al.</u> -U.S. Patent No. 5,960,170, and <u>Dotan</u> -U.S. Patent

No. 5,822,517) do not disclose, teach, or suggest the claimed limitations of (<u>in combination with</u>

<u>all other features in the claim</u>), computer readable medium further stores a list comprised of

information that is descriptive of at least one of known viruses and of known classes of viruses,

said list being used by said object examination code segment when programmatically examining

the object for the presence of a computer virus, as found in claim 30.

Response to Arguments

7.   Applicant's arguments filed on June 25, 2004 have been fully considered but they are not

persuasive.

In response to applicant's argument that "Chen et al. does not teach any mention of about

a current state of an object and a state of the object as it existed at a time in the past" is fully

acknowledged but is not deemed to be persuasive.

The Examiner had cited Chen et al. column 9, lines 11-62 to show that the objects already

exist upon execution of the virus detection program. Chen et al. discloses tools exist to assistant

in the production of virus detection objects. The Examiner cited Chen et al. column 12, lines 12-

67 to simply point out the comparison between existing and needed virus detection objects.

Therefore, broadly interpreted to read on state of the object, which is the result, derived from the

comparison. Chen et al. further teaches in column 17, lines 59-67, and see column 18, lines 1-39

the current stage of objects as well as monitoring detection objects originally transmitted to the

client.

Referring to applicant's argument on page 5 (Paper No. 5) wherein the applicant indeed

acknowledges that Chen et al. column 19, lines 1-38, and column 21, lines 3-39, teaches "state

engines" indicating the different stags in the operation.

In response to applicant's argument that "Chen et al. does not teach that the stored objects are invoked or running programs" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to Chen et al. wherein the stored objects are executed to activate or start a program is disclosed, for example, see Chen et al. column 18, lines 1-16, also see Chen et al. column 9, lines 12-62.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner is establishing motivation in obviousness in the knowledge

generally available to one of ordinary skill in the art, to modify the invention of <u>Chen et al.</u> with

the teachings of <u>Dotan</u>, as explained in the office action above.

In response to applicant's argument that "the conclusion of obviousness is erroneous

because it would change the principle of operation of <u>Chen et al.</u> To modify <u>Chen et al.</u> as

suggested by the Examiner changes <u>Chen et al.</u> principle of operation from one of executing the

virus detection object on non-invoked object to one of executing the virus detection object on

invoked object" is fully acknowledged but is not deemed to be persuasive.

The Examiner points to <u>Chen et al.</u> column 9, lines 49-67, and <u>Dotan</u> column 4, lines 1-

56, which teach objects and the invented method is invoked prior to the program being stored

into memory. Furthermore, The Examiner contends that nowhere in the claim language does the

recitation of invoked vs. non-invoked object is cited.

The mere fact that the cited references mention the process that is claimed clearly means

they do exist in the art either alone or in combination, and the examiner broadly interpreted the

art as such. However, in this case the combination of <u>Chen et al.</u> with the teachings of <u>Dotan</u>

teaches to activate or start a program, for example <u>Chen et al.</u> column 18, lines 1-16, also see

<u>Chen et al.</u> column 9, lines 12-62.

In response to applicant's argument that "<u>Dotan</u>'s procedure is not iterative therefore

would render <u>Chen et al.</u>'s unsatisfactory for its intended purpose" is fully acknowledged but is

not deemed to be persuasive.

The Examiner points to Chen et al.'s iterative procedure is not directly linked to the

applicant's claims, however, it is well known that a procedure can be executed once or

repeatedly depending on the requirements and the requirement definition. Since Chen et al.

further teaches iterative execution of the procedure does not take away from the fact that it can

be executed once.

In response to applicant's argument that "Chen et al. does not teach storing information

about the presence or location of achieved objects within an object to be scanned for viruses" is

fully acknowledged but is not deemed to be persuasive.

The Examiner points to Chen et al. column 18, lines 1-27, also see Chen et al. column 17,

lines 1-40, wherein a directory is disclosed and is read on determining location.

The applicant argues further that Chen et al. figure 4C as showing "locations storing

object by "Virus Identifier"" has nothing to do with storing information concerning archived

objects within object being scanned for viruses. The Examiner disagrees stating that a directory

or a list of objects in a memory/database in itself contains location information. Chen et al.'s

figure 4C clearly teaches that after scanning, the step of sorting/filtering takes place by Virus ID

to a location specified for that particular object.

In response to applicant's argument that "Chen et al. does not teach neural network

features, instead Chen et al. reference "state engines", "knowledge modules" and "inference

engines"" is fully acknowledged but is not deemed to be persuasive.

www.dictionary.com defines neural network as computer architecture in which

processors are connected in a manner suggestive of connections between neurons; can learn by

trial and error ...broadly interpreted by the examiner to be applicable to any type of network (all

network types). A specification for the use of this type of network or network specific data does

not deem the application to be novel. Any data can be stored or processed by a computer or a

computer network under functional equivalence and does not make the process novel.

The Examiner points to <u>Chen et al.</u> column 19, lines 1-38, and column 21, lines 3-39,

wherein citing different modules clearly shows the diverse applications that <u>Chen et al.</u>'s

invention can be implemented with.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Neveen Abel-Jalil whose telephone number is 703-305-8114.

The examiner can normally be reached on 8:30AM-5: 30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil
September 15, 2004

                                                                SAM RIMELL
                                                          PRIMARY EXAMINER